

CLAIMS

What is claimed is:

1. A two-part orthodontic bracket, comprising:

a base;

at least one slot associated with the base configured to receive an arch wire;

a holding device pivotally connected to the base in a manner so that the holding device is movable about a pivot axis between an open position and a closed position relative to the base and slot, and so that the holding device is tiltable relative to the base about at least one axis other than the pivot axis; and

a guide system that reduces tiltability of the holding device as the holding device is moved toward the closed position.

2. The two-part orthodontic bracket of claim 1, further comprising a connection device that pivotally connects the holding device to the base.

3. The two-part orthodontic bracket of claim 2, wherein the connection device comprises at least a portion of the guide system.

4. The two-part orthodontic bracket of claim 1, further comprising a latch for selectively latching and unlatching the holding device and base.

5. The two-part orthodontic bracket of claim 4, wherein the guide system causes a reduction in the tiltability of the holding device independently of latching the holding device to the base.

6. The two-part orthodontic bracket of claim 1, wherein the base and the holding device are only latchable in a precisely fixed spatial relationship to one another due to the guide system.

7. The two-part orthodontic bracket of claim 1 wherein the holding device comprises a cover having a rounded outer surface.

8. The two-part orthodontic bracket of claim 1, wherein the holding device is tiltable about at least one tilt angle in a range of about 0.5° to about 10° when in the open position.

9. The two-part orthodontic bracket of claim 8, wherein the holding device is tiltable about at least one tilt angle in a range of about 1° to about 8° when in the open position.

10. The two-part orthodontic bracket of claim 8, wherein the at least one tilt axis extends substantially horizontally when the base is arranged horizontally.

11. The two-part orthodontic bracket of claim 8, wherein the at least one tilt axis extends substantially vertically when the base is arranged horizontally.

12. The two-part orthodontic bracket of claim 1, wherein the holding device is movable about three axes perpendicular to one another when in the open position.

13. The two-part orthodontic bracket of claim 1, wherein the guide system comprises a movable bearing for the at least partly open holding device.

14. The two-part orthodontic bracket of claim 2, wherein the connection device comprises at least one spigot which is received in a corresponding link guide.

15. The two-part orthodontic bracket of claim 2, wherein the connection device comprises at least one spigot which is received in a corresponding link guide, with the curvature of a first peripheral section of the link guide corresponding to the curvature of the spigot and the curvature of a second peripheral section of the link guide being greater than that of the first peripheral section.

16. The two-part orthodontic bracket of claim 2, wherein the connection device comprises two spigots which are each received in a corresponding link guide, with at least one link guide not surrounding the associated spigot along its entire periphery.

17. The two-part orthodontic bracket of claim 2, wherein the connection device comprises at least one spigot which is received in a corresponding link guide which has a passage opening for a connection web between the holding device and the spigot.

18. The two-part orthodontic bracket of claim 17, wherein the connection device forms a snap connection that holds the holding device to the base.

19. The two-part orthodontic bracket of claim 1, wherein the bracket comprises at least one of a metal, ceramic or rigid plastic.

WORKMAN NYDEGGER
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

20. A two-part orthodontic bracket, comprising:

a base;

at least one slot associated with the base configured to receive an arch wire;

a holding device pivotally connected to the base in a manner so that the holding device is movable about a pivot axis between an open position and a closed position relative to the base and slot, and so that the holding device is tiltable relative to the base about at least one axis other than the pivot axis; and

a connection device that pivotally connects the holding device to the base and that comprises a guide system that reduces tiltability of the holding device as the holding device is moved toward the closed position.

WORKMAN NYDEGGER
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111

21. A two-part orthodontic bracket, comprising:

a base;

at least one slot associated with the base configured to receive an arch wire;

a holding device pivotally connected to the base in a manner so that the holding device is moveable about a pivot axis between an open position and a closed position relative to the base and slot, so that the holding device is tiltable relative to the base about at least one axis other than the pivot axis; and

a connection device that pivotally connects the holding device to the base, the connection device comprising:

at least one spigot attached to an end of the holding device by a connection wire; and

at least one link guide attached to the base into which a portion of a corresponding spigot is received.